INTRODUCTION AND EXECUTIVE SUMMARY

The quality of the New Jersey Institute of Technology and the remarkable role the institution plays in higher education became quickly apparent to the Middle States Evaluation Team during its visit to campus.

NJIT has made extraordinary progress during the 24-year tenure of its president, Saul Fenster. Developing from its roots as a local college of engineering, it now verges on being a major institution of research, a leader in the education of students from non-traditional backgrounds, and an engine of economic development for its region and state.

NJIT is about to enter a transitional phase in its evolution. With the imminent retirement of President Fenster and the appointment of a new president, NJIT will shortly embark upon a change in leadership after an unusually long and stable presidency. This change comes at a time of both challenge and opportunity. One important challenge, at least for the near future, arises from decreased state support, a consequence of the budgetary difficulties facing the State of New Jersey. Straitened financial circumstances will inevitably force difficult choices. But, in the end, the opportunities that will likely be seized as the variety of programs and initiatives at NJIT are examined closely for their strategic importance to its future will likely outweigh the near-term difficulties.

Overall, the team finds that NJIT is operating well when considered against Middle States guidelines. While the team has made a number of suggestions and recommendations, none of them represents a deep and critical problem that jeopardizes the future of the institution or would be difficult to solve. The team commends NJIT and its leadership for its remarkable development over the past 24 years, for its service in offering an opportunity for education to students who otherwise might not have one, for its emerging role as a center of research and entrepreneurship, and for the quality of its self-study.

Following are more specific comments, suggestions, and recommendations about specific aspects and functions of NJIT central to its success and this evaluation.
INSTITUTIONAL EFFECTIVENESS AND OUTCOMES

Over the past decade, a systematic and thorough approach to outcomes assessment has been institutionalized at NJIT. The university has developed stellar guidelines and procedures for assessing its effectiveness as well as student learning outcomes. The assessment plan consists of ongoing research-based studies, some including longitudinal and/or cohort-based data. Indeed, assessment has fast become the vehicle for driving this university. The university's assessment policies and procedures are both centralized and decentralized. Assessment formed the basis for NJIT's strategic planning and budgeting processes and the recently completed strategic plan, *An Emerging Presence: Self-Study and Strategic Plan 2002*.

NJIT maintains a rigorous professional accreditation schedule. The university's professional accrediting bodies\(^1\) have guidelines that include requirements for outcomes assessment procedures, as well as for procedures that use the results of outcomes assessment in a continual improvement model. With a model assessment plan in place, NJIT guidelines and procedures for assessing institutional effectiveness and student outcomes are evident at the course, program, department, school, and university levels.

Information obtained from outcomes assessment has been used to help the university achieve its strategic goals. Examples include improved 6-year graduation rates, heightened use of technology in teaching and learning, improved faculty advising, reduced numbers of non-matriculated students, improved residence life services, and general movement toward becoming a more student-centered university.

- At NJIT, the assessment of teaching and learning outcomes, and co-curricular activities influences all actions concerning the university mission, vision, strategic plan, and resource allocation. All teaching, learning, and student support programs and activities are routinely evaluated. Student evaluations of courses are evaluated at the end of each semester. Student satisfaction surveys and graduating seniors' surveys are administered annually. Alumni surveys are administered every three years. In almost all instances, outcomes assessment begins at the departmental level at the initiation of the department chair with oversight by the Committee for Department and Program Assessment.

\(^1\) They include the Accreditation Board for Engineering and Technology (ABET), the Association to Advance Collegiate Schools of Business, Computing Accreditation Commission of ABET, National League of Nursing, Council for Education on Public Health, the National Architectural Accrediting Board and the Middle States Association.
• It appears that quantitative data are the cornerstone for administration decision making. When tough decisions about the effectiveness of existing academic programs and student support services need to be made, the integrity of the institution is maintained because all constituents are aware of the role of outcomes assessment in informing the decision-makers.

• The university is commended for research studies that identified specific barriers to students completing their studies and for the action plan implemented to overcome these barriers. The results from the plan are impressive and the 6-year graduation rate increased from 37% in 1999 to 46% in 2001.

• In 1999, the Office of Institutional Research and Planning was reorganized. Since then, outcomes assessment has become embedded in the institutional culture and is now a thematic thread linking course goals, program goals and university strategic goals. The university should be congratulated on these efforts.

• Planning and management decisions have evolved into a research-based model. Cumulative data collected from course evaluations, student satisfaction surveys, and faculty advising have been used to identify reasons why NJIT students were not completing their studies. As a result of such analyses, NJIT has implemented innovative course design and instructional strategies. This is just one example of how outcomes assessment results have benefited the achievement of university goals and objectives identified as strategic priorities by the NJIT community. Another example involves the revision of the General University Requirements program.

In addition, the plan for the assessment of outcomes determines the extent and quality of student learning. The processes by which faculty and staff conduct such analyses produce results that promote excellence and institutional effectiveness. Student evaluations of courses are considered when faculty members are considered for promotion and tenure. In addition, such data are used to improve the delivery of the course as well as course design and development.

_Suggestion:_ The team suggests that a formal dissemination campaign be organized to ensure that the wealth of research studies conducted at the university on improving teaching and learning outcomes is shared with all university constituents on a regular basis. The campaign could include journals, university publications, brown bag lunches, etc.
PLANNING AND RESOURCE ALLOCATION

NJIT has set as a goal the improvement of its academic research and development. Analyses of comparative data from 13 current and target peer institutions show the institution ranking 1st in industrial research and development and 4th in academic research and development. Application of data generated through the assessment process resulted in a strategic planning process that outlined strategic priorities on which the university could focus over the next decade.

Faculty and administration realistically assess the institution’s working assumptions and priorities, provide opportunities for constituent participation, and routinely use data for the overall improvement of teaching and learning practices. In June 2001, analysis of faculty survey data indicated room for improvement in support of faculty research development. Accordingly, the 2002 strategic plan for the university maintains as one of its faculty-related goals to increase faculty research productivity/publication. The systemic approach to assessment is rewarded at the university level through the allocation of resources.

NJIT expects that An Emerging Presence: Self-Study and Strategic Plan 2002 should serve as a management tool for the presidential transition. In addition, the document is a self-study of the university’s strengths and areas for continual improvement. It includes key goals extrapolated from the university’s Assessment Plan, Information Technology Plan, Visibility Plan, Fundraising Plan and Academic Departmental Strategic Plans. Lastly, New Jersey has proposed budgetary constraints that may retard the implementation of some of NJIT’s strategic goals unless diversified funding sources are significant enough to overcome the reduction of public funding beginning FY2004.

Suggestion: The NJIT Strategic Plan may need to be modified in order to add more specific strategies about how the university will accomplish the goals of attaining a more national reputation for excellence and its targeted emphasis on globalization.

FACULTY

ACADEMIC FACILITIES, EQUIPMENT AND OTHER RESOURCES

The NJIT self-study report (see pp. 101-102) clearly documents strategic considerations for long-range planning. Based on a review of the report, which was further verified through discussions with representatives of the Trustees, administration, and faculty, NJIT seeks to increase its visibility and reputation, limit enrollments and focus on recruiting higher-quality student applicants, and prioritize research activities and
the expansion of academic programs to assist in the enhancement of institutional status.

The team recognizes the importance of this direction, but cautions NJIT to be wary of pursuing institutional status at the expense of those special qualities that have defined its present success and reputation, specifically a state and regional focus to attract and educate students who might otherwise lack higher educational opportunities in the scientific, engineering, and technical fields.

The team's review of the documentation and discussion with those affiliated with NJIT revealed that students are drawn to NJIT primarily because it represents the best technical college at the most reasonable cost—a "best buy" of sorts. The team recommends that NJIT pursue strategies to place it among the top technical schools in the country but in a way that emphasizes the placement of women and minorities in the fields of science, engineering, and technology. This type of visibility is consistent with the institution's long-standing mission and could be incorporated into the present strategic plan.

**Faculty**

There are 418 full-time faculty at NJIT, 303 in tenure-track lines with an additional 115 in non-tenure track lines who serve as special lecturers or adjunct instructors. The Institutional Research Office reports that approximately 98 percent of the faculty hold a Ph.D. or equivalent degree in their respective areas of expertise. Evidence based on the course catalog listings and the 2001 ABET self-study reports suggests that these faculty are of sufficient quality to meet the needs of the programs and students.

The team applauds NJIT's efforts to strengthen the diversity of its faculty during the past decade. Since 1991, the percentage of women faculty has increased from 10.6 (30) to 15.2 percent (46). Similarly, the percentage of black and Hispanic tenure track faculty has increased from 3.1 (9) to 5.3 percent (16) during the same time interval. The team strongly encourages NJIT to continue the pursuit of affirmative action programs that emphasize diversity.

Based on a review of existing documentation and a discussion with representatives of the faculty, the team finds a need for a systematic review of the Faculty Handbook, with particular attention given to the section on tenure and promotion procedures, thereby ensuring uniformity across colleges. Similarly, as part of the tenure and promotion procedures, the direction in which the university is moving, from an incentive-based research program to a required research for promotion and tenure, needs to be clearly documented in the Faculty Handbook. The team also acknowledges a concern with the university's ability to emphasize teaching if budget reductions lead to an increased emphasis on faculty research grants while holding staffing constant.
Faculty generally believe the current balance between full and part-time faculty is appropriate but caution against further proliferation of part-time and non-tenure track faculty, especially if such growth undermines the strength and quality of the permanent faculty. Importantly, the faculty believe greater attention ought to be directed toward the working conditions and status of persons in non-tenure track lines. This is particularly critical in the context of reduced budgets.

Teaching effectiveness is pursued vigorously at NJIT, serving as a necessary condition for promotion and tenure. Much of the evidence presented for an evaluation of teaching effectiveness is based on course surveys. The Provost stated that untenured faculty who fail to reach acceptable standards in this area for two consecutive semesters are often dismissed. The team commends the faculty for developing a master-teacher status, actively pursuing workshops to enhance professional development and requiring teaching portfolios, which document faculty growth in this area, as a condition for promotion and tenure. The NJIT faculty believe this balance between teaching and research is both appropriate and necessary if the institution is to continue its approach toward a student-centered environment. In addition, the team commends the effective and humane retirement plan of senior faculty, which increased the university's ability to hire 40 new junior faculty with an aggressive research commitment.

Students note that faculty are accessible to them through office hours, e-mail, and extended class hours. An additional strength is the university’s requirement for all students to visit with their faculty advisors each semester by placing an academic hold on the students' online registration until the advising appointment takes place. Efforts at tracking the success of minority and financially disadvantaged students indicate that they perform and graduate at rates comparable to the student population at large. An additional study, which assessed barriers to student achievement through the General University Requirements, identified several courses and instructors who failed students at considerably higher proportions than in other comparable courses. The results of this study led to a greater focus on faculty development and course redefinition.

Recommendation: The team recommends a systematic revision of the Faculty Handbook, with particular focus on ensuring that tenure and promotion policies are rigorous, clear, and consistent across all colleges and departments.

Educational Programs and Curricula
Evident from the supporting documentation and discussion with representatives of the administration and faculty is the presence of an assessment plan and the implementation of a system by which data can
be gathered and analyzed systematically. Indeed, there are many types of survey instruments that have been designed and routinely administered at NJIT for this purpose. Data drawn from these surveys provide a framework within which some curricular assessments are evaluated.

Direct assessments of student learning are also being pursued to inform curricular reviews and innovations. These include course assessments in writing, distance education, the humanities, social sciences, architecture, and various engineering fields. Much of this work revolves around students' work in capstone courses. However, largely absent from this plan is a systematic way to align institutional-level goals with those found at the program and course levels. While the team highly commends the NJIT faculty for these innovative initiatives and finds evidence that many of the stated student outcome goals are indeed being achieved, the team strongly recommends that these direct assessments of student achievement be more closely aligned with outcome goals at multiple levels.

The academic relationship with Rutgers has strengthened NJIT's profile in the liberal arts and has broadened faculty's intellectual horizons through collaboration.

Academic Facilities
NJIT has demonstrated a commitment to the development of academic facilities appropriate to an institute of technology. The team commends the institution’s efforts to build an information infrastructure that competitively serves students and faculty at all levels. Persons affiliated with the information technology efforts have a clear understanding of the institution's needs, goals, and strategic plans. They are currently serving the university very well. However, one concern of the team is the potential loss of continuing investment in this area, particularly in light of recent projected budget reductions, which would be detrimental to the timely strategic planning process in the area of information technology.

FINANCES, PLANNING AND RESOURCE ALLOCATION

The team had the opportunity to examine financial records of the institution covering the last five years. These documents included operating budget documents, foundation records, information technology planning statements and audited financial statements. In the opinion of the team, the documents were in order and presented a comprehensive overview of NJIT's fiscal health.

Evidence presented demonstrates that NJIT maintains a strong fiscal foundation. Since the last Middle States visit, state appropriations have grown by $10 million but currently represent only 35% of NJIT's total budget. Tuition revenues have increased by $28 million and now
represent 31% of the institution's revenue. Research and development income contributes over $45 million to the budget, an increase of $10 million since 1997, and 14% of the total budget.

On the expenditure side of the budget, most of the increase can be contributed to faculty and staff salaries. All categories of expenditures have increased over the last five years with the greatest increases in instruction and academic support programs. Instruction and academic support programs have grown by $30 million in the last 5 years and represent 73% of the budget, approximately equal to five years ago. The institutional support programs have also grown at a more modest level of $2 million and represent 16% of the budget, down from five years ago, when they constituted 19% of the operating budget.

NJIT's conservative fiscal management has served the institution well. In tight economic times, the institution continues to build its reserves.

Endowment Growth: Since the last visit, NJIT has undertaken an aggressive fundraising campaign - The Campaign for NJIT: Design for the Future - to build its endowment. Initially planned as a $120 million campaign, the institution has exceeded its goal by $60 million. Funds have been raised to support all areas on campus. Endowments to support scholarships, faculty chairs, faculty compensation, buildings and equipment have all grown as a result of the institution's efforts. These funds will provide long term support and stability to the school. The university is commended for its efforts.

Visibility Strategic Plan: In 1997, the Middle States evaluation team recommended that NJIT concentrate its effort on increasing the institution's name recognition. The university undertook this effort in conjunction with its fundraising initiative. This program sought to enhance the reputation of the university and convey its accomplishments to a wider audience. The university has increased its advertising budget annually. In 1998, the budget was $198,000 and has increased each year to its current level of $347,000. These funds allow NJIT to expand its targeted audiences.

Campus Security: NJIT increased its efforts in addressing campus security. Since 1997, it has completed its plan to implement a card access system fully in all campus buildings. These efforts have resulted in campus security receiving from the students the highest satisfaction rating of any service provided by the university.

University Information Services and Technology Plan: NJIT developed the UIST Plan in 1998. From that plan evolved a funding document outlining the campus goals to upgrade technology infrastructure and support. Six million dollars were received from the state to fulfill the
Each of the five schools received funds as well as each of the support units. The College of Engineering received the majority of funds totaling $1.8 million.

**Budgeting Process:** The Office of Administration and Treasury implemented a web based budgeting system. This system provides detailed budgeting information on demand at the departmental level. It allows administrators to access financial information at their convenience and has reduced staff processing time and paper costs.

**FY03 Budget Reduction Plan:** NJIT experienced a mid-year reduction of approximately $3 million. The university addressed this reduction through one-time actions. In FY03, the institution is preparing plans to make permanent reductions. At present, many members of the campus community are unaware of the actions necessary to address the reductions or the degree of cuts needed to identify the $3 million. The university should develop a plan involving as many stakeholders as possible as quickly as possible. Many members of the community are aware of the pending cuts, but little information from central administration has created an environment of unease and is leading to the development of rumors and fears that will compound the situation. Furthermore, the institution should engage its academic community in the discussions regarding pending reductions.

**Continuing Education/Distance Learning Department:** The university should examine its reporting of its Continuing Education/Distance Learning department. Several members of the academic departments questioned the fiscal health of this department. Many felt the department's recent success was made possible only through the participation of their faculty. Faculty also perceived that CEDL was receiving credit for tuition dollars for distance education courses taken by on-campus students, in effect counting towards CEDL and not towards their school. Whether this is true or not, some faculty appear to believe it. To clarify the situation, the policy for recognizing each department's and school's effort should be addressed and communicated.

**Office of Research and Development:** The ORD has experienced considerable success in recent years in terms of increased grant and contract activity and increased dollar generation. In the future, with the anticipated decline in state support and limitations on tuition increases, the ORD will be called on to play a greater role in maintaining and increasing NJIT's budget. Revenues are expected to grow from the current level of $45 million to $60 million within the next 3-4 years. The team commends the VP of Research and Development and his staff for their successes. The university is currently recruiting for an Assistant
VP and should fill this position as quickly as possible regardless of the pending reductions. Additional resources should be considered given the shift in dependence upon the success of this operation.

Recommendation: The team recommends that NJIT examine its plans for the Office of Research and Development and consider increasing its funding and staffing.

INSTITUTIONAL CHANGE AND RENEWAL

The team was pleased to find that NJIT appears, at all institutional levels, to use strategic planning to chart a course that responds well to its challenges and opportunities. The university is serious in planning for the future by assessing NJIT’s strengths and readiness to meet opportunities in the academic marketplace. At NJIT there is a well-earned pride in past accomplishments that gives rise to a certain optimism and a healthy "can do" attitude about the future. The team feels that this institutional signature is partially attributable to a dynamic synergy between effective top-down administrative leadership and vision as well as bottom-up faculty innovation in NJIT’s academic programs. The evidence for reaching this conclusion was apparent in the many historic documents that chronicle NJIT’s progress, as well as its attention to self-assessment, and strategic planning; these latter efforts culminated in the institution’s Self-Study and Strategic Plan 2002.

The team also notes that the university administration not only provided vision and guidance but also delivered the resources necessary for the rapid and timely infusion of computer technology on campus. Much of NJIT’s innovation in the academic program resides in the institution’s response to the challenges and opportunities created by computer technology. It is clear that early endorsement and integration of computers into the academic life of NJIT was a critical step for institutional advancement. In addition, early successes in computer integration led to the refinement and expansion of information technologies throughout the fabric of NJIT, and this has made NJIT a leader in delivering distance learning (DL) and in information technology (IT) pedagogical innovation. The team points to several developments as very positive and believe they have served the university very well: the e-course enrollments of nearly 5000 students, the development of web-based infrastructure, on-line non-credit courses and graduate certificates, new collaborations with industry and government, and a concerted effort to engage and assist faculty in the integration of computer technologies in traditional courses as very positive and believe that these developments have served the university very well.

The team also observes that innovation with computer technology is not the only type of academic renewal at NJIT. Also noteworthy, and
evidence of institutional commitment to innovation, are the Master Teacher program, the TLT initiatives, attention to mentoring of new faculty, review and response to General University Requirements (GUR), revision of engineering programs, expansion of graduate programs (including progress in and plans to expand program access), and substantial growth in research programs.

As in the past, NJIT would be well served as it looks to the future to focus on what the mission statement dictates and what the institution does best. The team also notes that the institution has already identified a list of appropriate tasks in the Self-Study and Strategic Plan 2002. Here the team notes that in outcomes assessment, employers rate NJIT graduates lower in communications skills, but attention is being given to correcting this deficiency in various ways. The team encourages NJIT to continue these efforts. In order to continue to serve the community and under-prepared students, the university should expand its impressive and diverse array of pre-college and community outreach programs. Not only will community relations be enhanced, but also the university can heighten its current distinction as a national leader in accessibility—both Self-Study goals.

Distance learning or e-learning has a significant presence on campus. It has grown out of the research of two NJIT faculty members in the 70’s and 80’s. Students who are in reality some distance from the campus as well as resident students enroll in e-learning courses. Faculty members from all of the colleges, except Architecture, participate in teaching the courses. Significant support is provided to the faculty in creating an online course and to the student in registering and successfully completing a course.

The team found that the Self-Study was not as forthcoming as it might have been in explaining curricular innovation already occurring at NJIT. As a consequence it seemed to us that innovation at NJIT meant distance learning (DL), and this is certainly not the case. As goals B.4.3-4 become realized and faculty are more comfortable with information technology, much of the material, such as course lectures, syllabi, etc. that are currently in e-learning courses will also become available to traditional courses via the course web page. Hence, care should be taken to ensure the institution does not become one where resident students take all courses as e-courses.

The team suggests that NJIT establish a policy concerning which regular courses will be made available to residential students as e-courses. There also seem to be negative incentives for faculty to develop and offer e-courses. Some perceive that CPE receives the tuition benefits for courses developed in departments. If this is the case, there is currently no incentive for a department to offer e-courses. If this is not the case, then there is a communication problem that needs to be addressed.
Suggestion: The University should continue to expand its impressive and diverse array of pre-college and community outreach programs.

Suggestion: NJIT should establish a policy that articulates the role and appropriate use of e-courses in the education of on-campus residential students.

MT LAUREL CAMPUS

The Mt. Laurel campus is located approximately ninety minutes south of the main NJIT campus at Newark. It was begun before 1990 to provide a technological educational presence in that region of the state and continuing education opportunities to local industries. Its mission has since expanded, and the campus now offers several undergraduate programs as well as a masters program in engineering management. It currently services approximately 250 undergraduate and 100 graduate students.

The NJIT presence at Mt. Laurel currently resides in space on the campus of Burlington County College. The campus is under major development and currently has two buildings with a new science center scheduled to open in the near future. The dean and faculty at the Mt. Laurel campus anticipate the enrollments on this campus will continue to grow. Given the situation, the NJIT administration needs to determine the degree to which this campus will be allowed to grow and may also want to consider developing a strategic plan for this campus or to better incorporate issues related to this campus into the current Strategic Plan.

The team has some concerns since the Mt. Laurel campus is only mentioned in the Strategic Plan in connection with Goal A:1 Students and Student Life. It indicates that recruitment of students, particularly transfer students, will be focused toward the Mt. Laurel campus. However, the document does not specifically address other issues that must be addressed to achieve this objective or will arise once it is met. The Mt Laurel campus needs to become more visible to the local and the academic communities via improved advertisement and permanent signage. In addition, the current space allocation is almost completely filled with the current enrollment. If this campus is to continue to grow, NJIT needs to explicitly plan for the additional space and personnel resources that will be necessary.

STUDENTS

The Academic and Student Services Division is in good hands under the leadership of a Vice President who has wide respect among staff and the academic community. The language spoken in this area always involves
key words such as “student centered,” and “building a campus community.”

Vision: Each department head in this area who participated in the interviews demonstrated a keen sense of vision about where the area is today, and where it should be in the future. In addition, the strategic plan, which they helped develop, presents a realistic set of goals for improving and enriching the academic mission of the university. However, on balance, the student services goals and emphasis should receive equal attention so as to offer a desirable educational experience for all students. Students should benefit from knowing what plans (mission) are being made to enhance their experience and the expected outcome.

Assessment Outcomes: Assessment surveys, focus groups, and personal contact with students provide ample information and data to improve the quality of student life. Results from these data are taken seriously and documented evidence shows an administration that is serious in improving student satisfaction in all areas of student and academic life. Yet, some students feel that communications could be improved while at the same time they note that whenever they report a problem, it is attended to quickly. More and better ways to communicate with students before a problem or issue is raised might temper the impression that communications is an afterthought. It was gratifying to hear the provost say, “keep the focus on the student,” and to “err on the side of the student.”

Alumni Affairs: It would appear that NJIT students are more interested in academics and getting a job than they are in becoming strong alumni. Building a campus community through student programming, athletics and other activities should enhance loyalty to the institution after graduation. Also, a greater and more visible role for alumni could strengthen this area.

Student Services: Service offices under the Vice President and the Dean of Students are focused, student-oriented, and demonstrate concern for making all of the services, “student friendly.” While staff members perform their responsibilities well, decreased resources may force them to rethink the quality and breadth of services now available. Most notable are Career Development and Athletics. Career Planning is essential to positive student outcomes and Athletics has the ability to help improve campus community and offer activities for students beyond 4:30 p.m. The same can be said for EOP and the Learning Center where student ratios to staff and tutoring are essential if the students are to succeed.

It should be noted that staff in student services are warm, friendly, and student centered. Also, the university is to be commended for its
ability to have faculty heavily involved in the recruiting efforts on both the undergraduate and graduate level.

Diversity: The university is on target with its goals to add more diversity to the campus. Students seem pleased with the diversity already present and enjoy the opportunity to learn about and appreciate other cultures. Increasing the number of women has educational merit and is understood as a goal in the enrollment area.

Retention: Retention in the Honors College is excellent and the experiences for students aid in retention efforts. There is a concern among some of the Honors College students that there is a lack of honors courses and research opportunities in their majors. These talented students want academic challenges and demonstrate that they are capable of more.

Academic Services recognizes the need to improve retention and graduation rates and have set out a plan of action to accomplish this goal.

Suggestion: NJIT should develop approaches toward creating strong bonds between the institution and its alumni, starting with students before they graduate and leave campus.

Suggestion: NJIT should consider carefully concerns expressed that there are too few honor courses and research opportunities for majors in the Honors College.

Suggestion: NJIT should pay special attention to enhancing and enlarging space for athletics and recreation.

STUDENT LIFE FACILITIES, EQUIPMENT AND OTHER RESOURCES

The university is undergoing an ambitious building plan to add needed space. While academic services and student services spaces are attractive and assessable, activity space for students, including athletics, are important. New construction would be enhanced by “decorating” the campus to create a more collegiate environment.

The scope and breadth of the areas under the Vice President for Academic and Student Services is large and complex. Every facet of the university has an impact on the success of this area in educating the whole student. Key areas, such as admissions, financial aid, and enrollment, are the lifeline of the institution. Failure on their part could result in disastrous outcomes for the entire university. Because of the importance of this area, the new president should give considerable thought about any intended changes. The staff have proven that this
configuration works and they all work collegially to support each other outside the responsibilities of their own work. A strong sense of team is present, and team members understand their role as vital in creating a true university. The university is experiencing an upwards spiral which should greatly aid in its visibility not only in the state of New Jersey, but beyond its borders nationally, and internationally.

LIBRARY & OTHER LEARNING RESOURCES

NJIT has many reasons to be proud of its library operation. Faculty, administrators (at all levels) and students all praise the library's staff. In fact, on various satisfaction surveys, "helpfulness of the library's staff" placed first. Not only are the librarians considered very service-oriented individuals, who obtain frequent feedback from their users (e.g., focus groups), but they are also universally regarded as skilled professionals who are ably led. The library liaison system, whereby each librarian works with assigned academic departments, is also considered especially effective by the faculty.

The library collaborates very well with other key players in the learning resources landscape (Information Services and Technology, Distance and Continuing Education, and Instructional Technology and Media Services) in order to make high-quality information resources both available and readily accessible. There is great interest in educating faculty about, and training them in the use of, new teaching technology. The library might consider expanding its offering of videos to support both the curriculum and serious non-curricular viewing.

The library's collaboration goes beyond the campus as well, extending to other portions of Newark (most especially with Rutgers—Newark) and particularly to undertakings with the other academic libraries throughout New Jersey. The library director's active participation in New Jersey's Virtual Academic Library Environment has resulted in significant benefits to NJIT, such as sharing in consortial purchasing of electronic resources.

The library is heavily and usefully involved in "information literacy" efforts, and a number of faculty seem interested in imbedding such skills into their department's program. At least two faculty commented favorably on what they had learned at an ASEE regional conference at West Point last Friday, in the course of a session describing how engineering faculty could imbed information literacy into the ABET framework. The development within the library of a larger electronic classroom in which to teach students modern research skills (see paragraph on "space", below) should contribute significantly in this area. The strategic plan's reference (p. 115) to developing and assessing information competency programs is laudable.
Areas of Concern: At the same time, the NJIT library has some serious problems. Chief among them is a matter noted by the institution and by Middle States reviewers alike five years ago, and still not addressed satisfactorily: the small number of books added annually to the collection. For a research university, even one so heavily oriented to technology and the sciences, to be adding fewer than 3,000 books on a regular basis strains the institution's claim to the status as a research university. As indicated in the Report of the two Middle States reviewers in 1997: "Sharing of library resources with neighboring institutions and on-line services notwithstanding, the size of the collection seems pitifully small for an institution that aspires to 'Research University' status. Books are still important." (1) Indeed they are.

Moreover, the institution's own 2002 self-study documentation and surveys, along with comments delivered by students and librarians during the team's visit, acknowledge this situation as a problem. Faculty did not seem to view it as seriously.

Therefore, it is strongly recommended that: a) the library staff draw up a plan for adding 5,000-7,000 new book titles annually, identifying current titles that would have been purchased in recent years had adequate funding been available, and; b) the NJIT faculty and administration widely discuss the wisdom of implementing the plan.

Another problem is the small number of library staff, especially professional staff. The librarians are obviously a high-caliber group, and ably led, but they are stretched thin. It is suggested that the library director gather data on staffing levels at a small number of (agreed-upon) peer institution libraries, and present them to the administration. (NJIT's list of "benchmark institutions" will need to be modified for this purpose in order to be meaningful.)

The third issue is library space, for users and for collections. Space for users is particularly at a premium, as often all the seats are occupied; this is an area of concern for students and faculty alike, in part because of the growing emphasis on studying in groups. The library's gate counts have been increasing steadily, almost doubling in the four years between the 1997 and 2001 academic years. Apparently the library is slated to acquire some 4,000 square feet of space when the Admissions Office moves out of the building that houses the library. That will help, but only in the short run.

Therefore NJIT should consider planning for the library's expansion into the adjacent parking lot, and in the meantime investigate the costs and benefits of compact shelving.

The self-study states (p.51): "The strategic plan includes the goal of continuing to increase the number of volumes, as well as storage space for books in the library." Yet the portion of the strategic plan pertaining to "Library, Technology and Learning Resources" (pp. 114-115) includes neither of these items.
Additional Observations: In conversations on-site, faculty, students, and administrators—uniformly—were very friendly and helpful. It would also have been helpful if certain documentation had been provided in the weeks prior to the arrival of the team as part of the materials mailed to each team member individually, e.g. the July 1997 Middle States report on NJIT's 1997 periodic review document. Thanks to library director Rich Sweeney and to Dr. Martha Zola for responding quickly and supplying essential information about the NJIT library several weeks before the team's visit.

Recommendation: The library staff should create a plan for increasing the collection by 5,000 to 7,000 new book titles annually and present it to the faculty and administration for their consideration and possible implementation.

(1) Report to Faculty, Administration, Trustees, Students of New Jersey Institute of Technology. Prepared following analysis of the institution's Periodic Review Report (July 29, 1997), 4.